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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/802,736	03/18/2004	Kanji Nakamura	1761.1022D	5049
21171	7590 03/09/2005		EXAMINER	
STAAS & HALSEY LLP			SELF, SHELLEY M	
SUITE 700 1201 NEW YO	ORK AVENUE, N.W.		ART UNIT	PAPER NUMBER
WASHINGTON, DC 20005			3725	

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
Office Action Summer	10/802,736	NAKAMURA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Shelley Self	3725				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the co	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONED	ely filed will be considered timely. the mailing date of this communication. 0 (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 09 De	<u>ecember 2004</u> .					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
·	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ☐ Claim(s) 1-3 and 6-8 is/are pending in the appl 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-3 and 6-8 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers						
9)☐ The specification is objected to by the Examine 10)☒ The drawing(s) filed on <u>09 December 2004</u> is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the Ex	re: a) $\square$ accepted or b) $\square$ objected or by accepted or by accepted in abeyance. See ion is required if the drawing(s) is object.	ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Application ity documents have been receive u (PCT Rule 17.2(a)).	on No  In this National Stage				
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  S Disclosed Independ Office.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

#### **DETAILED ACTION**

## Response to Amendment

The amendment filed on December 9, 2004 has been considered but is ineffective to overcome the prior art reference and an action on the merits follows. Upon further consideration the indication of allowable subject matter noted in the previous Office Action is withdrawn.

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 2 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claim 2 it is not clear how the second piston defines a gap in cooperation with an end of the...mold when the second piston is held in position adjacent (i.e. Examiner understands adjacent to be next too, having a common end point) the cylindrical mold. For example, it there is a gap how can the two be adjacent? Clarification is required.

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by McEwen (3,980,014). McEwen discloses a grinding sludge machine comprising a press unite having a cylindrical mold (20) a first reciprocating piston (40, 42, 44, 46) movably inserted in the cylindrical mold, and a second reciprocating piston (50, 52, 54) arranged in face-to-face relation with the first reciprocating piston (fig. 1), a diameter of an end of the second piston (50, 54) facing an end of the cylindrical mold being larger than an inner diameter of the cylindrical mold. Examiner notes that it is inherent for the second piston diameter to be larger than the inner diameter of the mold so as to close/seal the mold during compression.

With regard to claim 2 as best as can be understood and claim 7, McEwen discloses a gap (22) defining a coolant drain passage, during operation of the machine, the end of the second piston is spaced from the end of the cylindrical mold to define a coolant drain passage (22). Examiner notes that the piston (50, 52, 54) is spaced from an end, as the mold has more than an end and such ends have not been positively defined. Therefore the piston (50, 52, 54) is spaced from an end (fig. 1) with a gap (22) drain passage therebetween.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over McEwen (3,980,014). McEwen does not disclose the second piston spaced from the end of the cylindrical

mold at approximately 0.05 to 1.0 mm. It would have been obvious at the time of the invention to one having ordinary skill in the art to construct McEwen having a gap between 0.05-1.0mm because the discovering the optimum or workable range where general conditions of a claim are discloses requires only routine skill in the art and does not in itself impart patentability. See *In re Aller*, 105 USPQ 233.

## Response to Arguments

Applicant's arguments filed December 9, 2004 have been fully considered but they are not persuasive. Applicants arguments are drawn to the failure of the prior art reference to disclose an apparatus for grinding sludge that results from grinding hardened component parts a cylindrical chamber/mold and a second piston having a diameter larger than the inner diameter of the compression chamber/mold (Remarks, pg. 7). These arguments are not found persuasive, because the prior art reference, McEwen states sludge resulting from tool waste, it is well known in the machining industry to construct tools of hardened steel, therefore the tool waste is that of hardened parts. Further as to the failure of McEwen to disclose a cylindrical mold, this is not found persuasive, because, fig. 1 illustrates the ends of the pistons/gaskets to be circular for closing/sealing the material to be compressed within the chamber, therefore the chamber must too be cylindrical as such piston/gasket configuration would not adequately close/seal the chamber during compression if the chamber were rectangular.

Additionally regarding the argument that the second piston does not disclose an inner diameter larger than an inner diameter of the compression chamber/mold, this is not found persuasive, because the end of the second piston encompasses gasket (54), i.e. the gasket is part

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of the end of the piston. Therefore having a diameter of the second piston larger that the inner diameter of the compression chamber. Accordingly, McEwen does disclose the claimed invention and therefore anticipates the invention. The rejection is proper and stands.

#### Conclusion

Due to the newly cited rejection(s) above this Office Action is made non-Final.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelley Self whose telephone number is (571) 272-4524. The examiner can normally be reached Mon-Fri from 8:30am to 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Derris Banks can be reached at (571) 272-4419. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIE or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SSelf

February 28, 2005

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